nomic model was constructed using DATA 3.3. The model enables a cohort of individuals to be followed sequentially from bleed initiation, taking into consideration first-line efficacy, bleed continuation, switching to other products, re-bleeds and bleed cessation. **RESULTS:** Most patients were treated on an outpatient or home therapy basis. First-line efficacy was assumed to be 79% and 95.9% for FEIBA and NovoSeven respectively. 90% of patients would be switched from FEIBA to NovoSeven if FEIBA failed to stop a bleed. Total process costs from initiation to cessation in the baseline case were 286,966 SKK for FEIBA and 281,143 SKK for NovoSeven. **CONCLUSIONS:** The analysis indicated that the key economic drivers were the cost of the haemostatic agents, the dose used and the first-line probability of controlling the bleed. It could be concluded that the use of NovoSeven for first-line, high titre, high responding patients was not only justified on a clinical basis but also from an economic point of view since there was cost equivalence with FEIBA. The results of this study should generate debate amongst haematologists concerning management guidelines for the treatment of bleeding episodes in haemophilia patients with inhibitors.

POD2

DEVELOPMENT OF ECONOMIC AND OUTCOMES MODEL OF HEMOPHILIA TREATMENT IN LATIN AMERICA AND SOUTH EAST ASIA

Roberts H[1], Evans C[2], Gomperts E[3], Poulios N[3], Sagrolikar A[3]
[1]University North Carolina Medical School, Chapel Hill, NC, USA; [2]Mapi Values USA LLC, Boston, MA, USA; [3] Baxter Bioscience, Glendale, CA, USA

OBJECTIVES: In Latin America and Asia, individuals with hemophilia are often treated with cryoprecipitate as it is a component derived from a unit of whole blood, thus maximizing the economic and potential medical benefit of blood bank services. However, the risk of acquiring blood-borne viral infections is higher with cryoprecipitate than with factor concentrates. This is because the risk of acquiring blood-born infections increases with each exposure and has a cumulative effect over a person's life. We use available data to show that any acquisition cost savings or societal benefits that occur with the use of cryoprecipitate may be offset by greater total healthcare costs to treat transmissible viruses. **METHODS:** A model of one Asian country was employed to test the system. A literature review was conducted to obtain estimates of the prevalence and incidence of infectious agents in the donating population and therefore the blood supply and costs of treating the subsequent diseases. Epidemiological and health care cost data from international health organizations and regional experts in the treatment of hemophilia was utilized. This data forms the basis of an economic and outcomes model for hemophilia treatment. **RESULTS:** Based on the data identified in this particular country, the risk of exposure to HIV in individuals treated with cryoprecipitate is substantial: 4% after 5 years of treatment and it doubles after 10 years of treatment. Over a lifetime—60 years of treatment—it grows to 40%. The cost of treating AIDS in this region is high and immediate cost savings achieved by using cryoprecipitate are offset by future overall treatment costs of blood-borne infections. **CONCLUSIONS:** The model is useful for estimating total treatment costs and outcomes for hemophilia patients at risk for developing blood borne infections. The model incorporates a sensitivity analysis option allowing users to modify parameters specific to their country.

POD3

JOINT RECOVERY IN HIP AND KNEE REPLACEMENT: A COST-EFFECTIVE APPROACH

Brunenberg D, Joore M, Bekebrede L, van Steyn M, Bulstra S
University Hospital Maastricht, Maastricht, Netherlands

OBJECTIVE: In health care an increasing demand for care and relatively declining funds go together causing problems such as waiting lists and reduction of beds. The objective of this study was to shorten the length of hospital stay and to improve efficiency of care in joint replacement surgery. To attain this objective, changes were made in the care process: pre-admission screening and medical care during and after admission were geared to one another and rehabilitation programme after surgery, taking place in a living room. **METHODS:** The study design was a prospective cohort study with two patient cohorts. The intervention cohort was treated according to the new protocol. The control cohort received usual care. The joint recovery group consisted of 48 HR patients and 30 KR patients; the control group consisted of 50 HR patients and 32 KR patients. Both groups were prospectively followed for six months. Improvements in hip and knee function were calculated using baseline and six months function scores. Total hospital costs were calculated using length of stay and average costs per hospital day. Health state utilities were obtained by the EQ-5D, and were used to calculate QALYs (one year time horizon). Subsequently, a cost-effectiveness analysis has been performed. **RESULTS:** Mean age was 64.4 years. Hip and knee function improved in both groups (no significant differences). Length of stay decreased, causing substantial cost savings. Slightly more QALYs were generated in the intervention group. **CONCLUSIONS:** No differences between the groups in function improvement were observed. Joint recovery led to a 53% reduction in hospital days, as compared to usual care. As a consequence, hospital costs were almost halved in both intervention groups. Therefore, our conclusion is that joint recovery is more effective and less costly for both joint replacement groups, and thus dominates usual care.